

10/517273

PCT/AU03/00743

10 PCT/PTO 09 DEC 2004



Best Available Copy,

REC'D 02 JUL 2003

WIPO

PCT

Patent Office  
Canberra

I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. PS 2970 for a patent by BERNHARD PODIRSKY as filed on 14 June 2002.



WITNESS my hand this  
Twenty-sixth day of June 2003

JULIE BILLINGSLEY  
TEAM LEADER EXAMINATION  
SUPPORT AND SALES

**PRIORITY  
DOCUMENT**  
SUBMITTED OR TRANSMITTED IN  
COMPLIANCE WITH RULE 17.1(a) OR (b)

## CLADDING APPARATUS, METHOD AND SYSTEM

This invention relates to cladding apparatus and methods and systems. More particularly, this invention has application in roofing and thus roofing apparatus, its 5 method of implementation and to a roofing structure formed thereby are, for illustrative purposes described hereinafter with reference to this application. However, the apparatus, methods and structures formed by embodiments of the present invention may readily find application in wall cladding, lining and other structural applications.

10 According to a first aspect of the invention there is provided a cladding apparatus for finishing an exposed side edge of overlapping slab members adjacent a fascia panel, said cladding apparatus including:

15 a body portion having an inner surface and an outer surface said body portion and extending longitudinally between a leading edge and a trailing edge between opposed side edges;

1 said body portion having side portions extending outwardly from an arcuate central portion, wherein a first side portion may be disposed laterally of said central arcuate portion and a second side portion may depend from said arcuate portion;

20 the leading edge and the trailing edge provided with complementary inter-engaging formations permitting said body portion to overlap a next adjacent body portion when laid in longitudinal sequence; and

25 at least one elongate support web provided on an inner surface of the second side portion.

30 Suitably said at least one elongate support web is provided with a spigot end portion.

The formation of the leading edge may be an overlapping skirt portion and the formation of the trailing edge may be underlying recess portion.

30 The cladding apparatus suitably includes a longitudinal guide member having a lower face having a stepped configuration arranged for fitting with said overlapping slab

members, and an upper face having at least one longitudinal groove for supporting a side portion of said arcuate body.

5 The cladding apparatus suitably includes a longitudinal support member having an inner face for attaching to a fascia panel and an outer face having at least one recess for receiving said at least one elongate support web of a depending web portion of said arcuate body.

10 According to a second aspect of the present invention there is provided a method for finishing an exposed side edge of overlapping slab members adjacent a fascia panel the method including the steps of:

15 lying a longitudinal guide member having a lower face with a stepped configuration on the overlapping slab members along faces adjacent the side edge; attaching a longitudinal support member having a recess to the fascia panel; engaging at least one cladding body portion, having an elongate support web provided on an inner surface thereof, with said recess of the support member.

20 According to a third aspect of the present invention there is provided a cladding installation for overlapping slabs adjacent a fascia panel composed of a plurality of engaged cladding bodies and longitudinal members of the first aspect of the invention.

25 According to a fourth aspect of the present invention there is provided a longitudinal batten member attachable to a cladding surface said member having a recess lying in a first plane for inter-engagement with a spigot portion of a cladding member.

According to a fifth aspect of the present invention there is provided a cladding member comprising:

30 a substantially planar body having inner and outer faces; a web extending outwardly from a first end of the inner face of said body; a first projection extending from said web along said body; and a second projection extending outwardly from a second end of the inner face of said body.

Optionally the first and second projections have an enlarged portions provided thereon.

According to a sixth aspect of the present invention there is provided a cladding system for removably attaching a cladding member to a cladding surface including:

a longitudinal commencing batten member attachable to the cladding surface said member having means lying in a first plane for inter-engagement with a first portion of the cladding member; and

at least one longitudinal connecting batten member attachable to a cladding surface having means lying in a second plane disposed at an angle to said first plane, for inter-engagement with a second portion of said cladding member and having means lying in a plane disposed parallel to said first plane for inter-engagement with a portion of an adjacent cladding member. Preferably the cladding member is that of the fourth aspect.

15

Preferably said second plane lies normally to the first plane.

Optionally the system includes a longitudinal terminating batten member having means lying in a plane disposed parallel to said first plane for inter-engagement with a portion of said adjacent cladding.

Preferably the means for inter-engagement with said first portion of the cladding member is a recess, which may be provided substantially along the length of said commencing batten member. In this embodiment said first portion of the cladding member is preferably a projection which extends from a web depending from said cladding member. The projection may have an enlarged portion which assists in inter-engagement with said commencing batten member.

The means for receiving said second portion of said cladding member is preferably a recess which may be provided substantially along the length of said connecting batten member. Additionally, the means for inter-engagement with said portion of the adjacent cladding member is a recess which may be provided substantially along the length of said connecting batten member.

The invention will be further described with reference to preferred embodiments thereof as illustrated in the accompanying drawing and wherein:

5 FIG 1 is a perspective view of a body portion of a cladding apparatus in accordance with an embodiment the present invention;

FIG 2 is a perspective view of the body portion illustrated in figure 1 in the underside;

FIG 3 is a cross-sectional view of the body portion of figure 2;

10 FIG 4 is a cross-sectional view of the apparatus of figures 1 to 3 finishing exposed side edge of a tiled roof structure;

FIG 5 is a perspective view of a guide member in accordance with an embodiment of the present invention;

FIG 6 is a cross-sectional view of the guide member of figure 5;

15 FIG 7 is a perspective of a support member in accordance with an embodiment of the invention;

FIG 8 is an end view of the port member of figure 7;

FIG 9 is a perspective view of the completed cladding installation in accordance with an embodiment of the invention;

20 FIG 10 is an end view of a ceiling utilising the cladding system in accordance with an embodiment of the present invention;

FIG 11 is an end view of batten members and cladding members in accordance with an embodiment of the invention.

25 Figure 1 illustrates a body portion 108 utilised in the cladding apparatus of the present invention. The portion 108 has an inner surface 110 (see Fig. 2) and an outer surface 112 (see Fig. 1). The inner surface 110 and the outer surface 112 extend longitudinally between a leading edge 114 and a trailing edge 116. The leading edge 114 and trailing 116 extend between opposed side edges 118.

30 The body portion 108 is made has a curved shape having first 120 side portion (see Fig. 3) arranged to be disposed laterally from an arcuate central portion 122 and a second 121 side portion depending from said arcuate portion.

5 The leading edge 114 (see Fig. 2) is provided with a formation 124 which inter-engages with complimentary formation 126 (see Fig. 1) provided on an adjacent body portion thereby permitting the body portions to inter-engage when laid in a longitudinal sequence (see Fig. 9).

10 The body portion 108 is also provided with a pair of longitudinally extending elongate support webs 128 on the inner surface 110 thereof. The end portions 130 and 131 of said elongate support webs 128 are both provided with a spigot end portion.

15 One particular use of the cladding apparatus of the present invention is to finish the side edge of slab members, such as roof tiles to resist ingress of rain water and provide a more attractive look for the roof rather than having the side edges of the tiles exposed. As illustrated in figure 9 the tiles 104 are laid in an overlapping pattern over preinstalled roofing battens (not shown). A guide member 132 is laid on the exposed edge of the tiles. The guide member (see Fig. 5) extends longitudinally for the required length of the tiles 104. The guide member has on its lower face 134 a plurality of steps 136 which compensate for the overlapping nature of the tiles to provide a level upper face 140 when laid on the tiles 104. A longitudinal support member 144 (see Fig. 4) is 20 also fixably attached by its inner face 146 to the fascia panel 106 adjacent to the exposed edge of the tiles 104.

25 Turning to figure 9, the support member 144 is shown extending longitudinally along the length of the overlapping tiles 104. The support member may be attached to the fascia 106 by any convenient means such as gluing or nailing. The support member itself has an outer face 148 into which a pair of recesses 150 and 151 are provided.

30 The body portions 104 are placed adjacent to the exposed edges of the tiles 102 with the support webs 128 engaging within the recesses 150 and 151 of the support member 144. The first side portion 120 of the body portion 121 is also supported by the grooves 141 in the upper face of the guide member 132. (See Fig.4 and 9)

The required number of body portions is placed along the exposed edge of the tiles to provide the required finish. Of course both of the opposing side edges of the tiles can be finished using the cladding apparatus of the present invention (see Fig. 4).

5        Turning to Figure 10 the cladding system 152 of the present invention is illustrated. The cladding system may be used to clad any convenient cladding surface 156. The cladding surface 156 illustrated in figure 10 is a ceiling, however it will be apparent that the cladding system 152 of the present invention may be utilised on other cladding surfaces for example walls be internal or external walls or floors. The cladding 10 illustrated in figure 10 shows a single row of cladding members 157, 159. In practice a plurality of rows of cladding members would be provided adjacent to each other to fully cover the cladding surface. The cladding system of the present invention includes a longitudinal commencing batten member 154 (see Fig. 11) which is attached to the cladding surface by any convenient means such as nailing or gluing. The commencing 15 batten member 154 has a recess 158 which lies in a first plane 160 of the batten member 154. The commencing batten member is also provided with a groove 153.

20        A plurality of continuing batten members 164 are also attached to the cladding surface 156 spaced at a distance which matches the length of the cladding member 158, 159 that are used. The connecting batten member 164 also has a recess 166 provided in a plane 168 which lies normally to the first plane 160 of the commencing batten member 154 when those members are attached to the cladding surface. The connecting member 164 also has a further recess 169 lying in a plane parallel to the first plane of the commencing batten member 154.

25        The cladding system might also include a terminating batten member 174 which is attached to the cladding surface at the opposite end to the commencing member 154.

30        A first cladding member 157 has a projection 162 extending from a web 172 which depends from the cladding member 157. The projection 162 is provided with an enlarged portion 171 at the end thereof. This 171 portion is for locating within the recess 158 of the commencing batten member. The leading section 176 of the cladding member continues along the face of the commencing batten member 154. The trailing portion 178 of the cladding member 157 also has a projection 170 with an enlarged

portion 171. This enlarged portion 171 engages in the recess 166 of the connecting batten member. An adjacent cladding member 159 with a web 172 and projection 162 is then engaged within the recess 169 of the connecting batten member 164. The required of connecting batten members 164 are provided on the cladding surface with 5 corresponding cladding members 159 and engaged therein. The cladding member 159 that is adjacent to the terminating batten member 174 is then engaged within the recess 176 of that batten member, therein completing the column. It will be appreciated from Fig. 10 that the cladding members are, when installed, in an abutting relationship within a single row, as illustrated. Also, the side edges of adjoining rows will, when installed be 10 in an abutting relationship.

It will be realised by those skilled in the art that the present invention provides a cladding apparatus that is quick easy to install when compared with current apparatus in use. In particular, the ability to install the cladding by a simple sliding action rather than 15 through the use of specialist tools represents an improvement upon current cladding apparatus and systems.

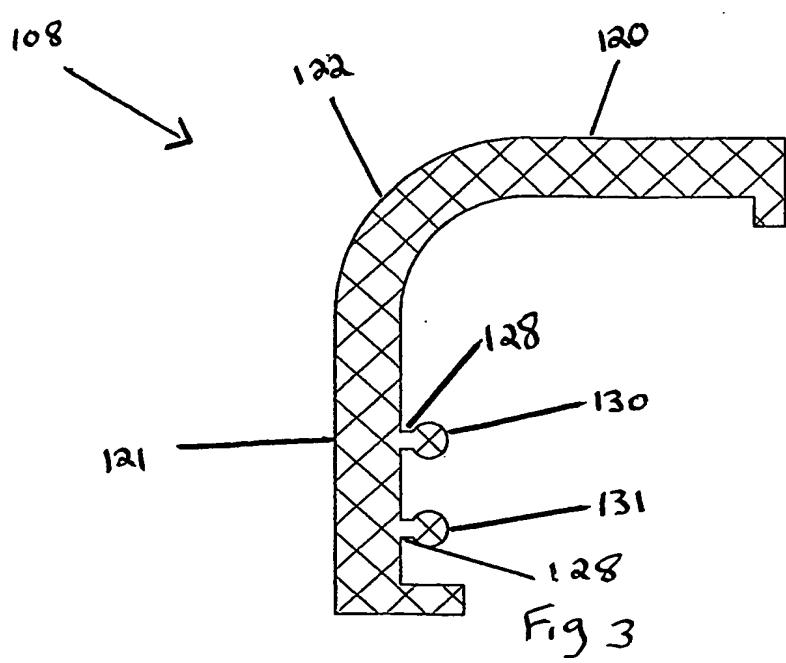
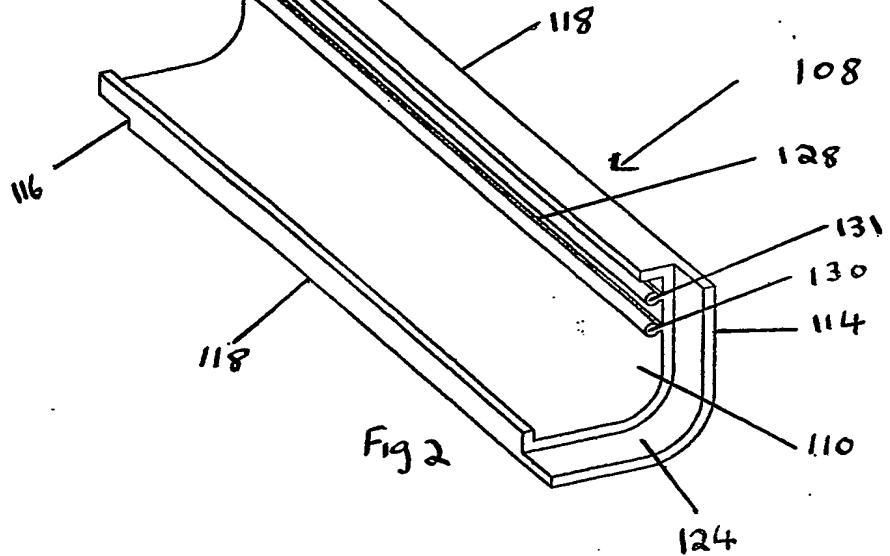
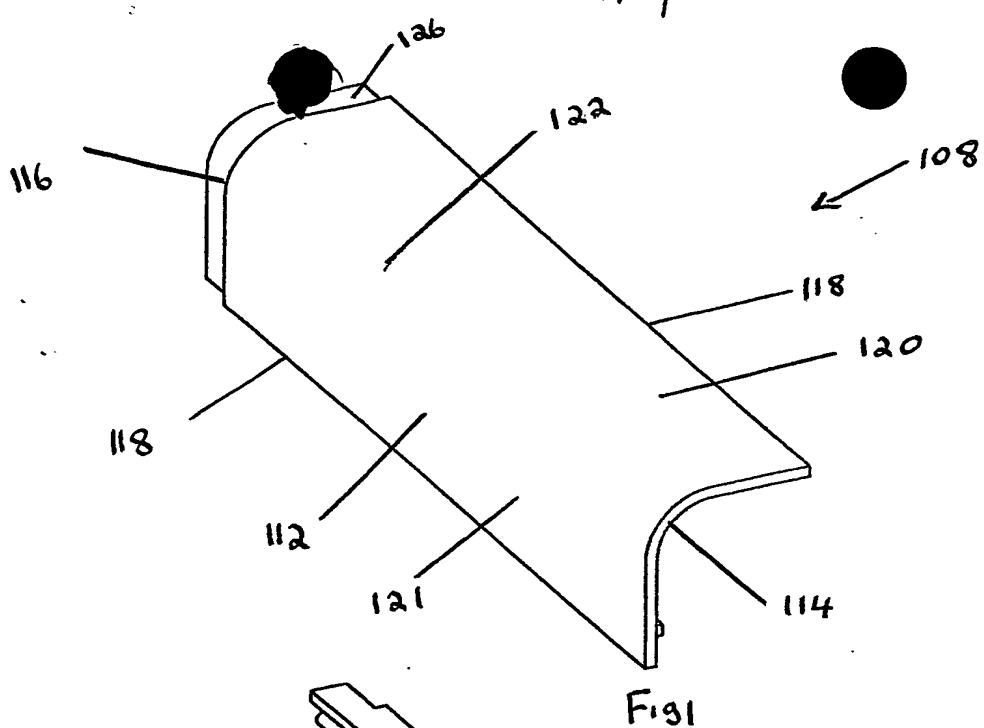
It will of course be realised that while the above has been given by way of 20 illustrative example of this invention or such another modifications and variations thereto as would be apparent to persons skilled in the art deemed to fall within the broad scope and ambered of this invention as is herein set forth

25 DATED THIS FOURTEENTH DAY OF JUNE 2002.

BERNHARD PODIRSKY

BY

PIZZEYS PATENT AND TRADE MARK ATTORNEYS



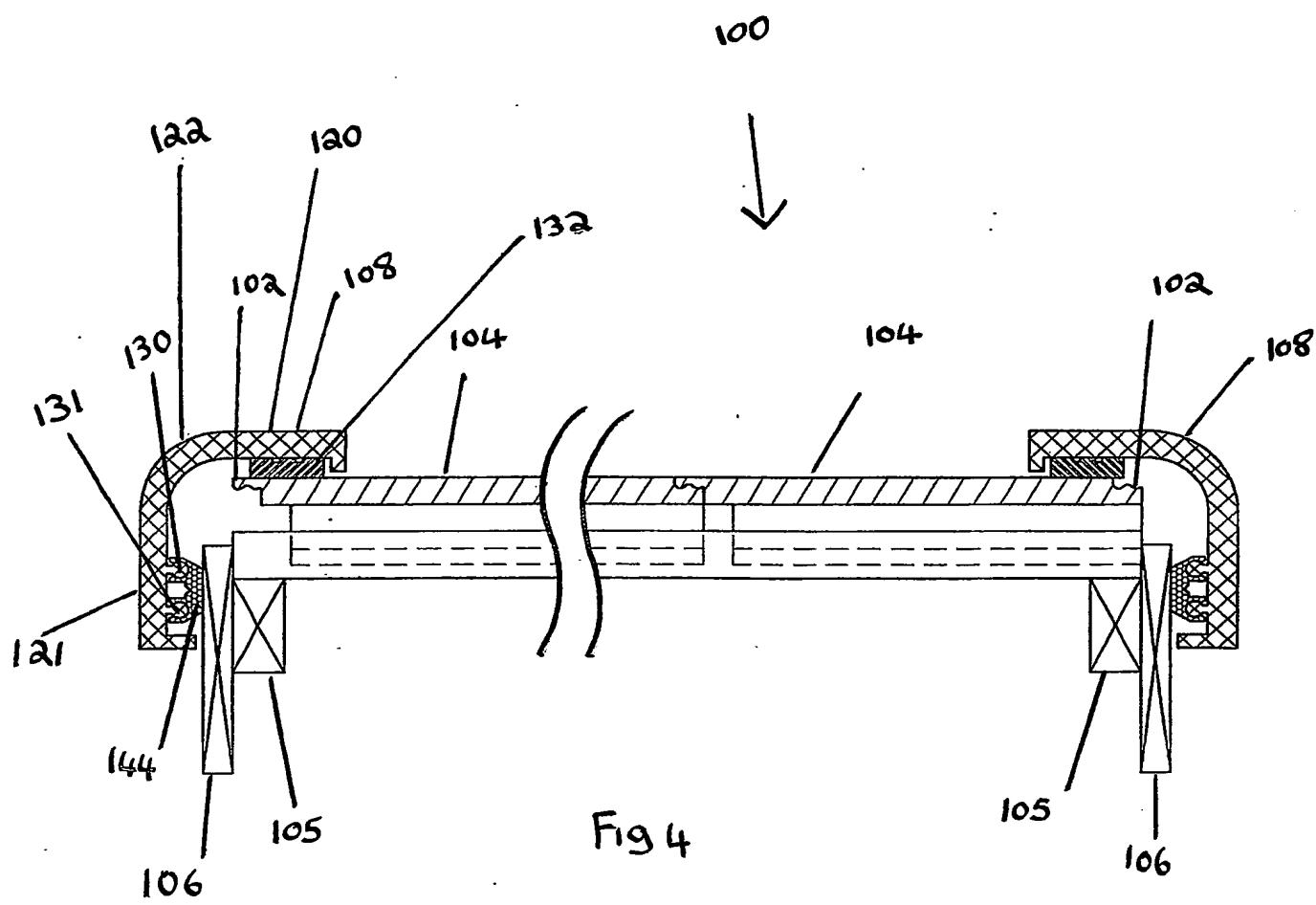


Fig 4

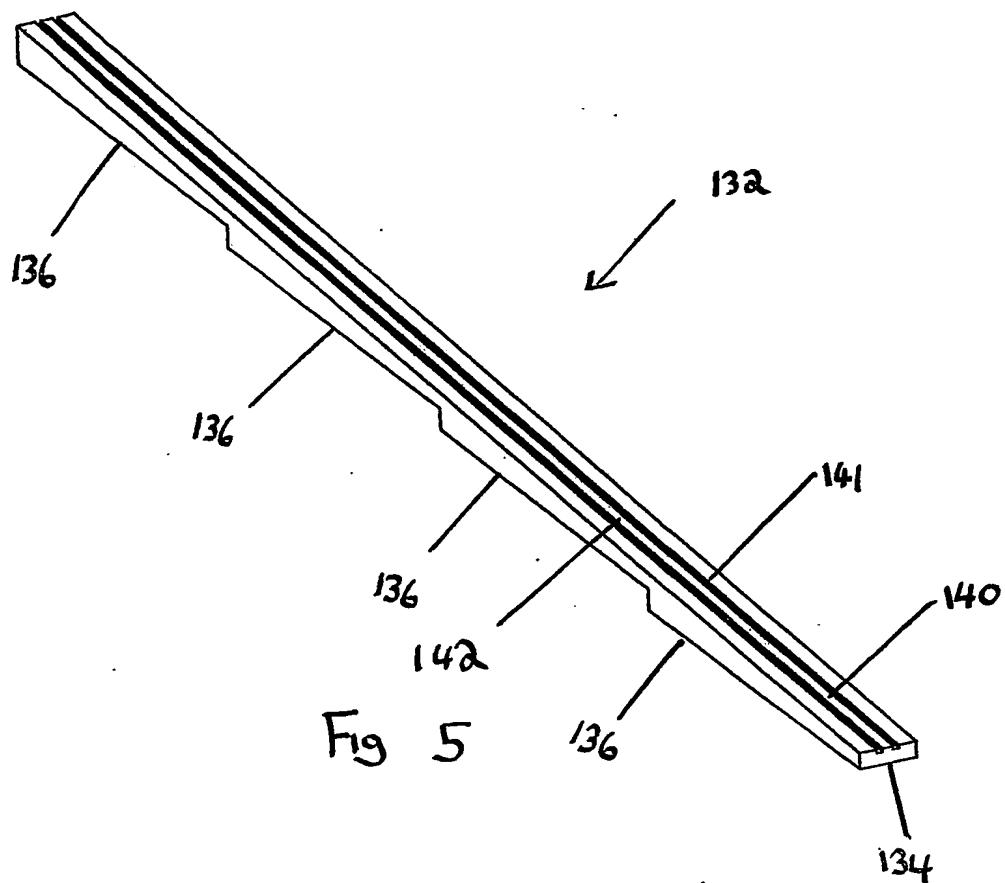


Fig 5

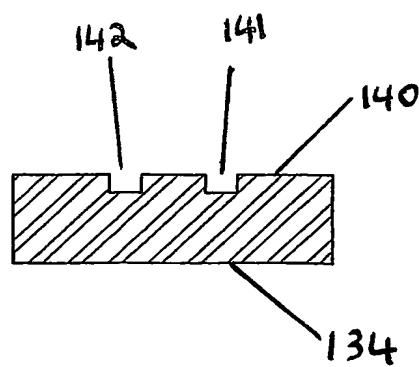


Fig 6

4/7

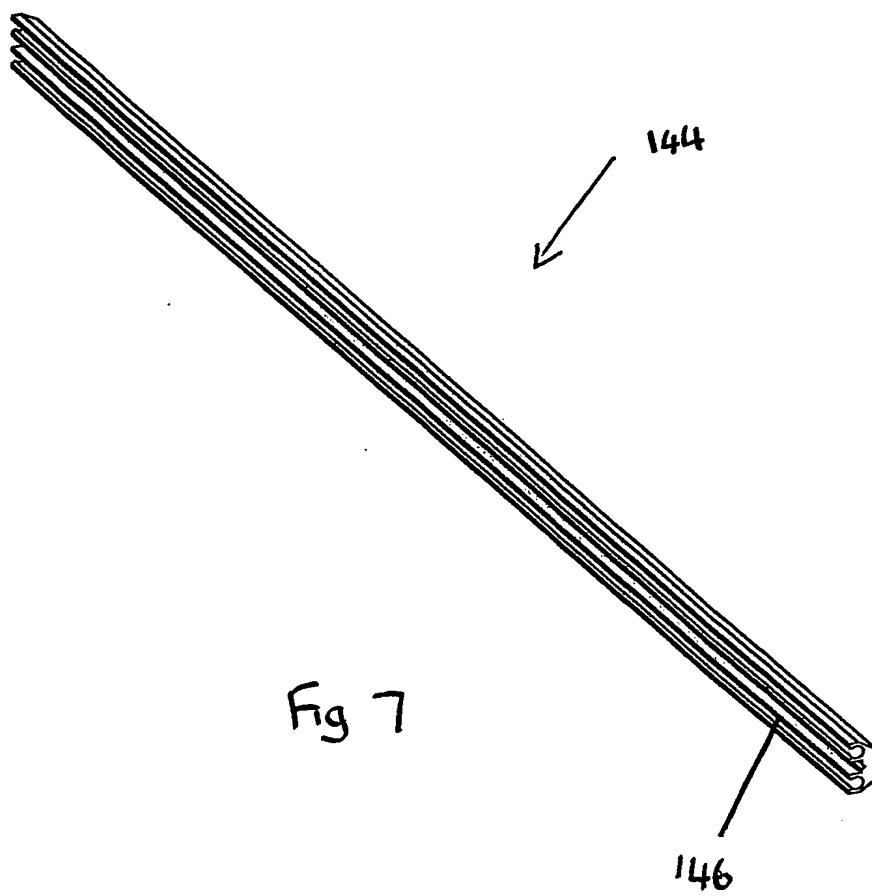


Fig 7

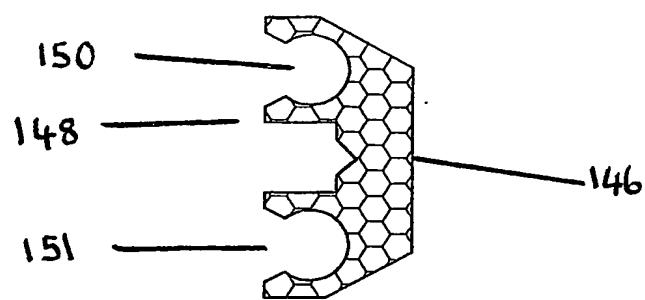


Fig 8

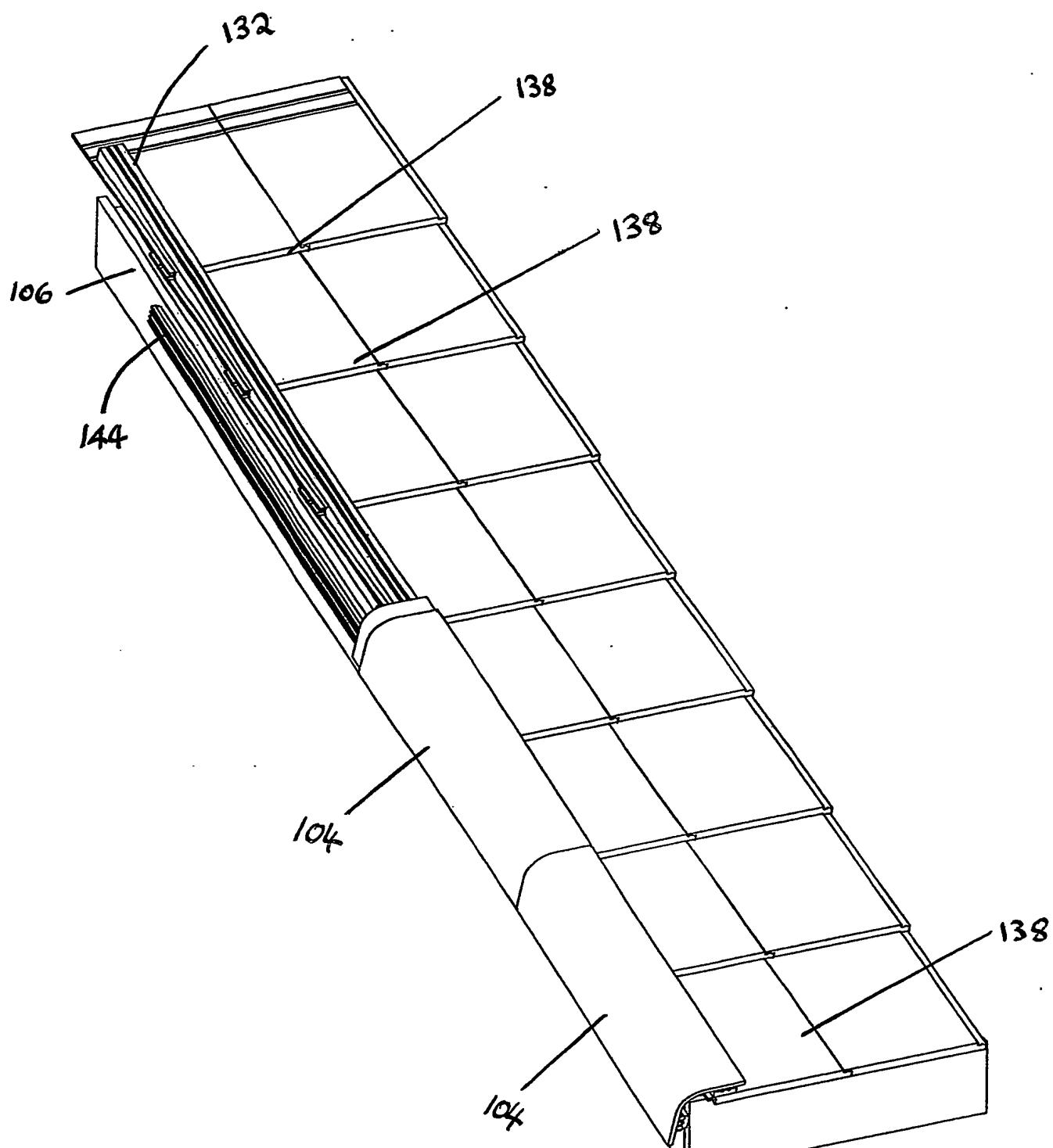


Fig 9

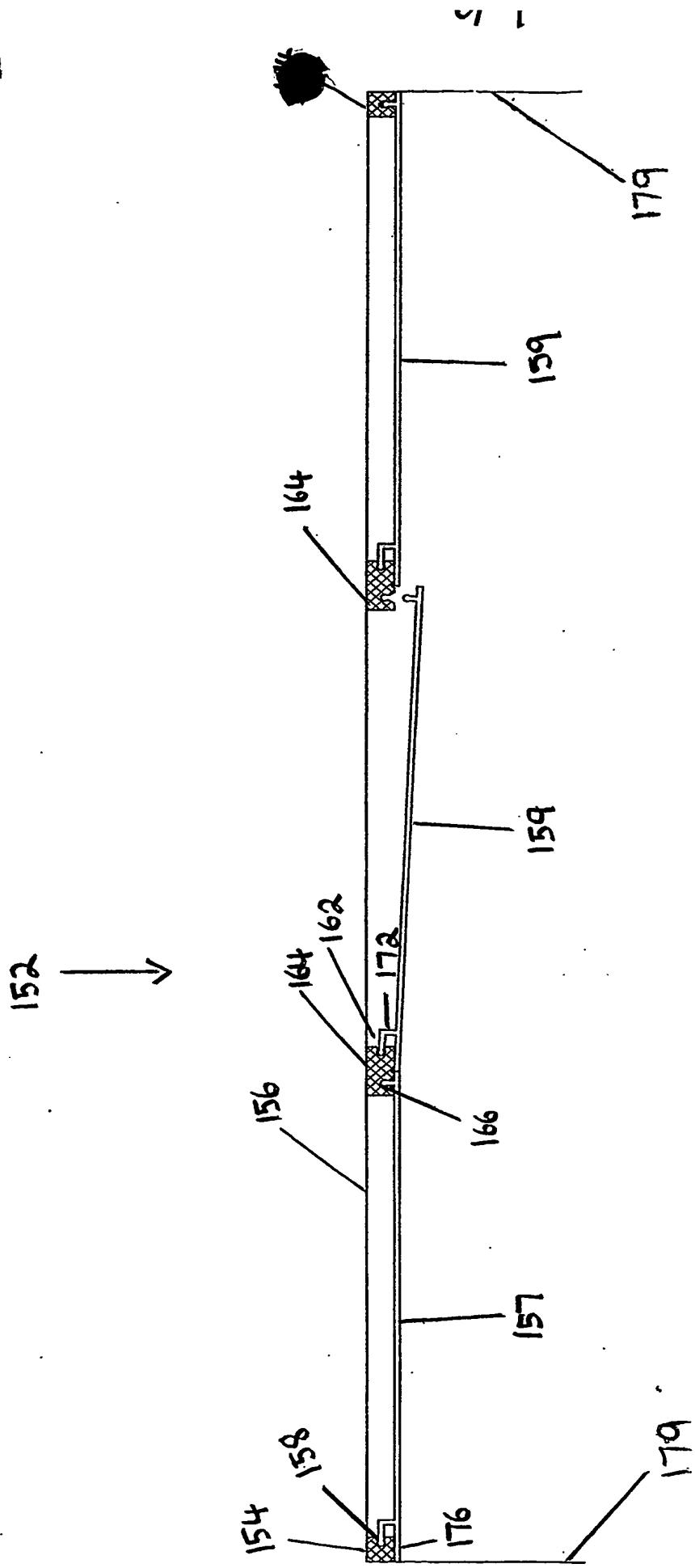
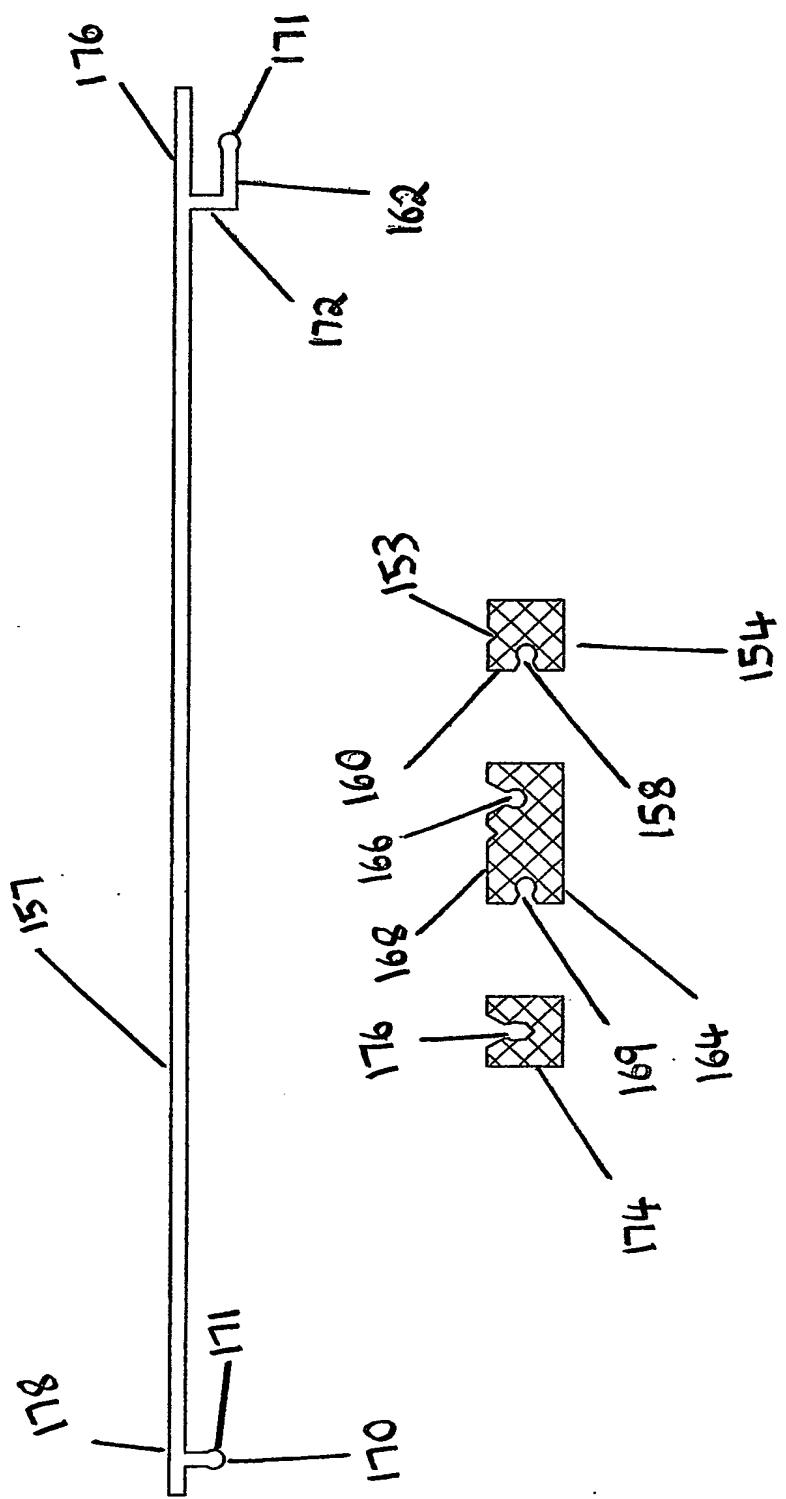


Fig 10



Fig

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**